Lafayette

Model LR-800

Stock No. 99-0005WX

70-Watt AM-FM STEREO RECEIVER

INSTALLATION AND OPERATING MANUAL

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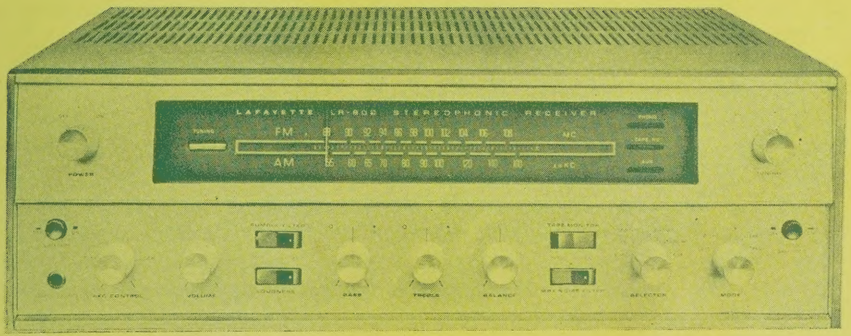
Lafayette



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GENERAL

The Lafayette Model LR-800 is a deluxe stereophonic high fidelity music center. It combines an AM tuner, FM stereo multiplex tuner, stereo control-preamplifier, and a powerful 70-watt stereo amplifier (35 watts each channel) in one single, handsomely styled component. By simply adding loudspeakers, you can enjoy individual AM and FM broadcasts, or the full-dimensional FM stereo broadcasts — all reproduced with a quality that is unsurpassed.

Stereo inputs have also been provided for high-quality reproduction of programs from external sources such as record players, tape recorders, etc. A full range of front panel controls provides complete flexibility of operation and ensures the finest sound reproduction at all times regardless of variations in program sources or room acoustics.

In order that you may benefit from the many operating and performance features designed into this receiver, we recommend that you carefully read all the instructions contained in this manual. Also, we suggest that you keep the manual close at hand and in a safe place so that you can refer to it when necessary.

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RECEIVER LOCATION

The LR-800 may be used in any convenient location such as cabinet shelf, table or bookcase. Modern and attractive in appearance, the receiver lends itself to this type of installation.

Since all electrical equipment generates heat, provision must be made for proper ventilation. The receiver is well ventilated in itself, but sufficient space should be allowed around it to permit free air flow at all times. DO NOT place books or other objects on top of the perforated cover since this will restrict ventilation. Failure to observe these precautions will result in sharply reduced component and tube life.

If you intend to place the receiver on a shelf in an equipment cabinet, special consideration should be given to the problem of ventilation. An open-back cabinet will provide the best ventilation. If the cabinet does not have a removable back, several large holes or slots should be made in the rear, as high up and as low down as possible. It should be remembered that, for effective ventilation, provision must be made for cool air to enter at the bottom and hot air to leave at the top.

ELECTRICAL CONNECTIONS

AC POWER

The receiver is designed to operate from a power source of 105-120 volts AC 50-60 cycles. Do not attempt to use the receiver on any other power source or damage will result.

CONVENIENCE OUTLETS

Two convenience outlets are provided at the rear of the amplifier. These may be used to supply AC power to external equipment (such as a record player tape, recorder, etc.).

AC power is available at the right hand ("switched") outlet only when the receiver is switched on. AC power is available at the left hand ("unswitched") outlet at all times, however. The unswitched outlet is recommended for use by a record player; turning off the receiver will not then also turn off the player while its idler wheel is still engaged. In this manner, flat spots will be prevented from developing on the idler wheel.

The AC power drawn by equipment connected to the switched outlet should not exceed 40 watts. Equipment connected to the unswitched outlet may draw as much as 30 watts.

AM ANTENNA

The ferrite loop-stick built into the receiver assures adequate reception of all local AM stations. However, in fringe areas, high noise areas, or where surrounding metal objects interfere with normal reception, a regular antenna lead should be connected to the terminal designated AM (see Fig. 1).

NOTE: The ferrite loop-stick is mounted on a swivel bracket. For maximum pickup, the loop-stick should be swung away from the chassis.

FM ANTENNA

The antenna is the single, most important factor in obtaining good, distortion-free FM reception. The finest, most sensitive receiver will not operate properly if it is fed with a poor FM signal. You should therefore give careful consideration to the selection of an antenna for your receiver if you want the best results — particularly during FM reception.

In areas close to the transmitter, a simple indoor dipole antenna ("rabbit ears") may suffice. It should be remembered, however, that the pick-up of reflections (similar to "ghosts" on TV) will result in poor stereo reception. These reflections must therefore be reduced to a minimum, either by careful orientation of the indoor dipole antenna or, if this will not eliminate them, by using a more directional oudtoor type.

In areas further from the transmitter, the use of an outdoor antenna is highly recommended. These are available in various types (see the Lafayette catalog). For reception of stations scattered in many directions, a non-directional type may have to be used. If the desired stations lie mostly in one direction, a highly directional type of antenna will provide better results. When

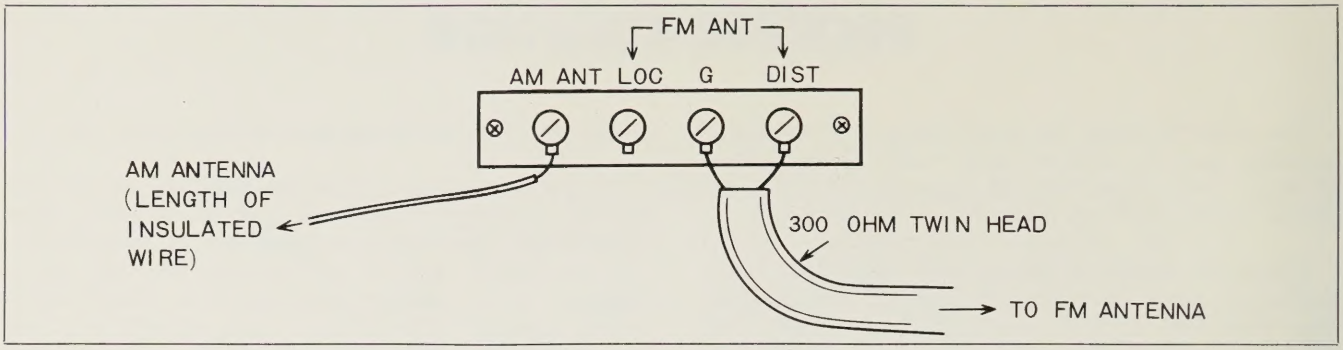

FIG. 1

using a directional antenna, always orient it for best reception of the desired station. The correct position will be indicated by maximum closure of the tuning indicator on the receiver.

If you presently use an outdoor TV antenna, it may be utilized to provide good reception of FM stations. Simply connect a 300 ohm twin lead between the receiver and TV antenna lead-in, using a 2-set antenna coupler such as the Lafayette TS-326 or TS-344.

You should remember, however, that some TV antennas are designed to attenuate signals in the FM band (the FM band is located between channels 6 and 7) to minimize interference on TV from FM stations. In such cases, it will be necessary to install a separate FM antenna.

ANTENNA CONNECTIONS

There are three FM antenna screw-terminals located at the rear of the receiver — LOC (local), G (ground), and DIST (distant). In most cases, the 300 ohm twin lead from the antenna should be connected to the "G" and "DIST" terminals, as shown in Figure 1. This will ensure maximum receiver sensitivity and thus provide best reception of the weaker stations. If you are located in an area which is extremely close to stations, there is a possibility that the very strong signals will overload the receiver and cause distortion. If this occurs, disconnect the wire connected to the "DIST" terminal, and attach it to the "LOC" terminal. This reduces the sensitivity of the receiver and prevents overloading by too strong a signal.

CONNECTIONS TO ASSOCIATED EQUIPMENT

LOUDSPEAKER CONNECTIONS

WARNING: Never operate the receiver without first connecting a speaker to each channel output.

The receiver has output terminals for connection to speaker systems of 8 or 16 ohm impedance. Wherever possible, it is recommended that identical speakers be used. For indoor installations, ordinary plastic-covered lamp cord can be used to connect speakers to the receiver, and may be extended as far as 100 feet without any significant power loss.

Connect your left and right speaker systems as indicated in Figure 2. If the speakers have coded terminals (+ and –), try to maintain a consistency in the manner of connections — in each case, connect the "– and +" speaker leads to the corresponding speaker terminals on the receiver as shown. This will ensure that your speakers are connected in phase. If the speaker leads are not coded, they may be connected without regard to polarity. Any out-of-phase condition which may result can be corrected by means of the phase switch during actual operation of the receiver (as indicated later).

When speakers are connected, set the IMP. SELECT switch to either "8 Ω" or "16 Ω", whichever is closest to the impedance rating of the speakers used. If you are not sure of their impedance, set the switch to "8 Ω". For speaker operation the front panel push-button switch marked "Speakers" must be released (in the out position).

STEREO HEADPHONES

The receiver is also designed for stereophonic headphone listening. Simply plug the headphones

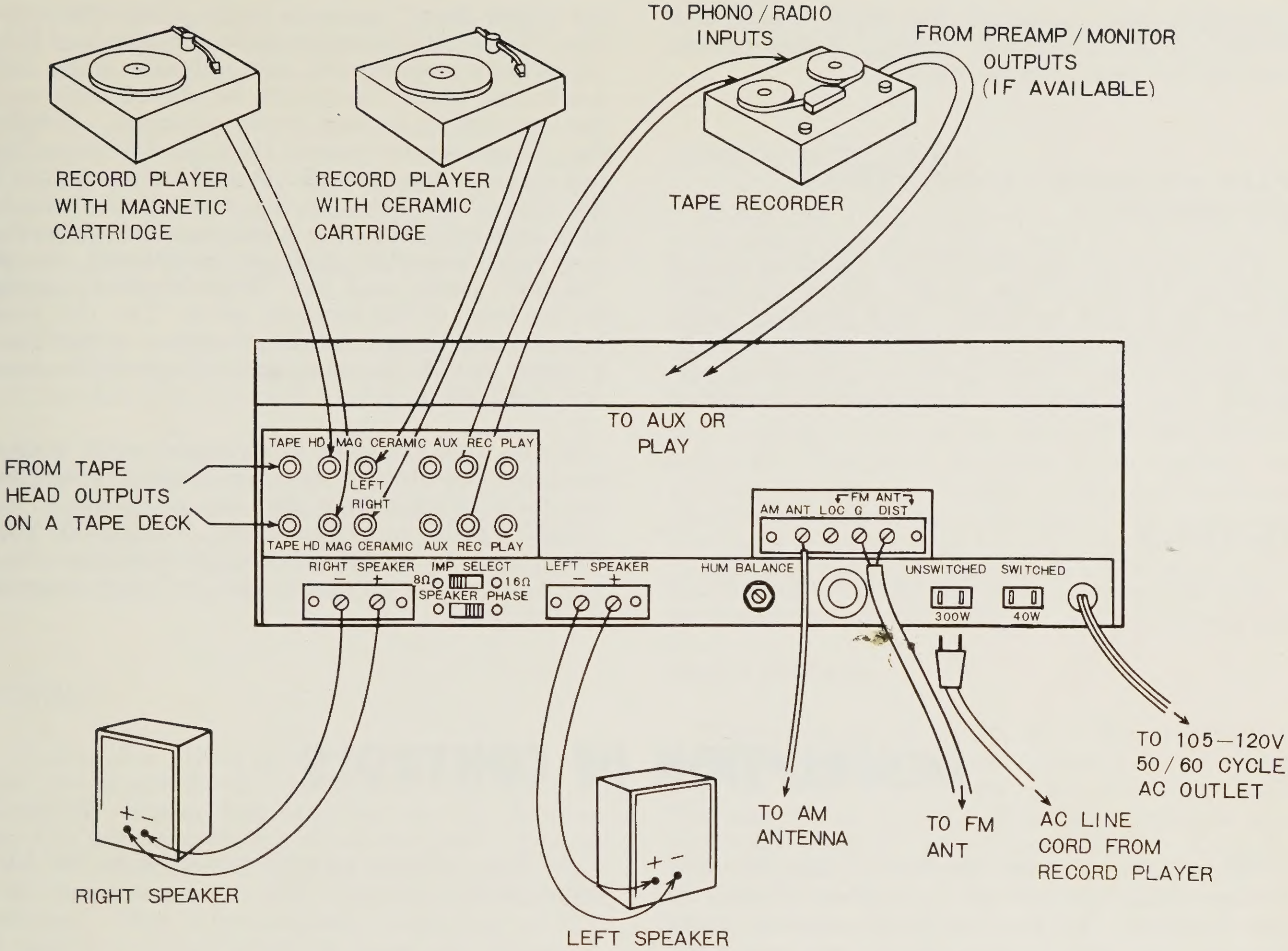

FIG. 2

(8 or 16 ohms) into the front panel receptacle marked "Stereo Phones". If you wish to listen privately without the speakers being on, depress the push-button switch marked "Speakers". To switch the speakers on again, depress the push-button and release to allow the button to come outward ("ON").

RECORD PLAYER CONNECTIONS

The shielded audio cables from a record changer or turntable are normally terminated with RCA-type phono plugs. The input jacks on your receiver are designed to accept this type of plug. To avoid loss in the high frequency tones, the cables from the record player should not exceed 10 feet in length.

RECORD PLAYERS WITH MAGNETIC CARTRIDGE

The two output cables from a stereo record changer or turntable equipped with a magnetic or variable reluctance cartridge should be connected to the left and right input jacks marked "MAG".

The input circuits at the "MAG" jacks offer the standard RIAA equalization necessary for outputs from magnetic or variable reluctance cartridges. If the record player is equipped with a monophonic cartridge, connect the single output cable to the left or right MAG input jack.

RECORD PLAYERS WITH CERAMIC CARTRIDGES

The two output cables from a stereo record changer or turntable equipped with a ceramic or crystal cartridge should be connected to the input jacks marked "CERAMIC". If the record player is equipped with a monophonic cartridge, connect the single output cable to the left or right CERAMIC input jack.

NOTE: Ceramic or crystal cartridges used should be of the low-output type. High-output cartridges may overload the input when connected to the CERAMIC jacks. If this occurs, the "AUX" jacks can be used.

TAPE RECORDER CONNECTIONS
RECORDING

The two jacks marked "REC" offer an output suitable for connection to the Phono or Radio inputs on a tape recorder. Any program being reproduced through the amplifier will always be available at the "REC" jacks for recording purposes. Figure 2 shows a tape recorder connected to the amplifier.

PLAYBACK

The two jacks marked "TAPE HD" (Tape Head) are special inputs designed for connections from the "tape head" outputs from a tape recorder. The "Tape Hd" inputs provide the standard NAB equalization necessary for outputs from tape heads, and allow the tape to be played back using the amplifying system in the receiver. Outputs that have already passed through a pre-amplifying stage in the recorder should be connected to the "AUX" inputs. In the event that these inputs are not free, the pre-amplified output of the tape recorder may be connected to the "PLAY" jacks, and the "Tape-Monitor" switch on the front of the receiver set to "On" (for more information regarding the operation of the Tape-Monitor switch, also see section headed "Switches and Controls").

If the tape recorder is equipped with a third head for monitoring the tape during recording, the monitoring output can be connected to the "PLAY" jacks on the receiver. Placing the Tape Monitor switch in the ON position will then allow you to hear the program that is being recorded on the tape.

DESCRIPTION OF CONTROLS

We suggest you take the time to read this section carefully. There are a number of controls and switches on the receiver, each carefully designed for ease of operation. A full understanding of each control and its functions will enable you to obtain maximum enjoyment from the receiver.

SELECTOR

This switch selects the program source. In detail, each position does the following:

AM — Selects the output of the AM tuner section for reproduction through the amplifier.

FM — Selects the output of the FM tuner section for reproduction the through the amplifier.

FM STEREO — In this position, special multiplex circuitry is switched in to produce left and right channels from an FM stereo signal.

PHONO — Selects sources connected to MAG **and** CERAMIC input jacks. It is therefore not desirable to have equipment connected to both these pairs of jacks at the same time.

TAPE HD — Selects sources connected to the Tape Hd input jacks.

AUX — Selects sources conected to the AUX input jacks.

FUNCTION INDICATIONS

In addition to the above, the Selector also provides switching for the electronic tuning indicator bar and the three colored function indicator lights. In the AM, FM, and FM STEREO positions of the Selector switch, the electronic tuning indicator is activated and lights up. In the remaining three positions, the tuning indicator is switched off and the three colored lights provide an indication of the selector switch setting for Phono, Tape Head, and Auxiliary.

This feature offers visible indication of the Selector switch setting from any listening position.

MODE

This switch determines the manner in which program sources (previously selected by the SELECTOR switch) will go through the amplifier section of the receiver.

LEFT — A program source connected to the left input jack is reproduced through the left channel and is heard from the left speaker.

RIGHT — A program source connected to the right input jack is reproduced through the right channel and is heard from the right speaker.

MIX — A program source connected to the left and right input jacks is mixed and reproduced through both channels and speakers. Also, a single program source connected to either the left or right input jack is automatically reproduced through both channels and is heard from both speakers.

STEREO — This provides stereophonic reproduction through both channels when the SELECTOR switch is in the AM or FM position.

REV — During stereo reproduction, you may wish to reverse the sound outputs from the left and right speakers. Placing the switch in the REV (reverse) position will cause the instruments formerly heard from the left speaker to be heard from the right speaker, and vice versa.

TUNING

Tuning for either AM or FM is carried out with the single control designated TUNING. An electronic tuning indicator bar on the receiver permits accurate tuning of all stations. Always tune for maximum closure (smallest shadow area) with the selector in FM, FM STEREO or AM position. This is particularly important on FM — poor tuning will result in noise and distortion. On FM stereo, poor tuning will also result in a loss of channel separation.

VOLUME

This is a master volume control which adjusts the level of both channels simultaneously. If one channel is producing a larger volume of sound than the other, individual sound level adjustment may be achieved by means of the BALANCE CONTROL.

BALANCE

This control is used to balance, or equalize, the level in each channel in the amplifier. This is particularly important in stereo reproduction (see "Speaker Phasing and Balancing"). The normal setting is in the 12 o'clock position. Moving the control to the "Left" will decrease the volume from the right speaker and thus provide an apparent increase of sound from the **left** speaker. Moving the control to the "Right" will decrease the volume from the left speaker and thus provide an apparent increase of sound from the **right** speaker. You should, therefore, always move the control in the direction which requires an increase in volume.

BASS AND TREBLE

These are dual concentric friction-type controls which permit the bass (low) or treble (high) tones of both channels to be adjusted simultaneously. The concentric controls may be operated individually by holding one knob firmly and rotating the other separately. When the indicator lines on these knobs are set to the center or 12 o'clock position, response is normal and the amplifier reproduces all input frequencies equally. Clockwise rotation (from center) increases the bass or treble tones, and counterclockwise rotation decreases them. In each case, the outer knob controls the right channel and the panel knob behind it controls the left channel.

AFC CONTROL

Your receiver is equipped with an effective AFC (Automatic Frequency Control) circuit which may be used to counteract any frequency drift that may occur on FM. The AFC control is continuously adjustable from zero (TUNE) to maximum (LOCK), and thus permits varying amounts of AFC to be applied, as necessary. To gain a better understanding of the action of this circuit, tune in a strong FM station with the Selector switch in the "FM" position and the AFC control in the "Tune" position. Proper tuning to the center of the station signal is indicated by maximum closure of the electronic tuning indicator bar. The sound at this point should be clear and undistorted. Detune (slightly) until the station becomes noisy and distorted and the tuning indicator bar widens. Now rotate the AFC control to "LOCK" — you will notice that the station sound clears up and that the tuning indicator registers proper tuning again as if the receiver had been manually retuned. This "retuning" has been carried out automatically by the AFC circuit.

Generally, all FM tuning should be carried out with AFC control off ("Tune" position). This will enable you to tune more accurately to the center of the station signal because AFC, when on, has a broadening effect on tuning. After accurate tuning has been carried out using the tuning indicator (maximum closure), the AFC control may then be adjusted to provide only that amount necessary to prevent drift. In most cases, a mid-position setting will be adequate.

Certain conditions, however, require the use of less AFC. For example, applying too much AFC when tuning in a weak station which is adjacent to a strong one may cause the tuning

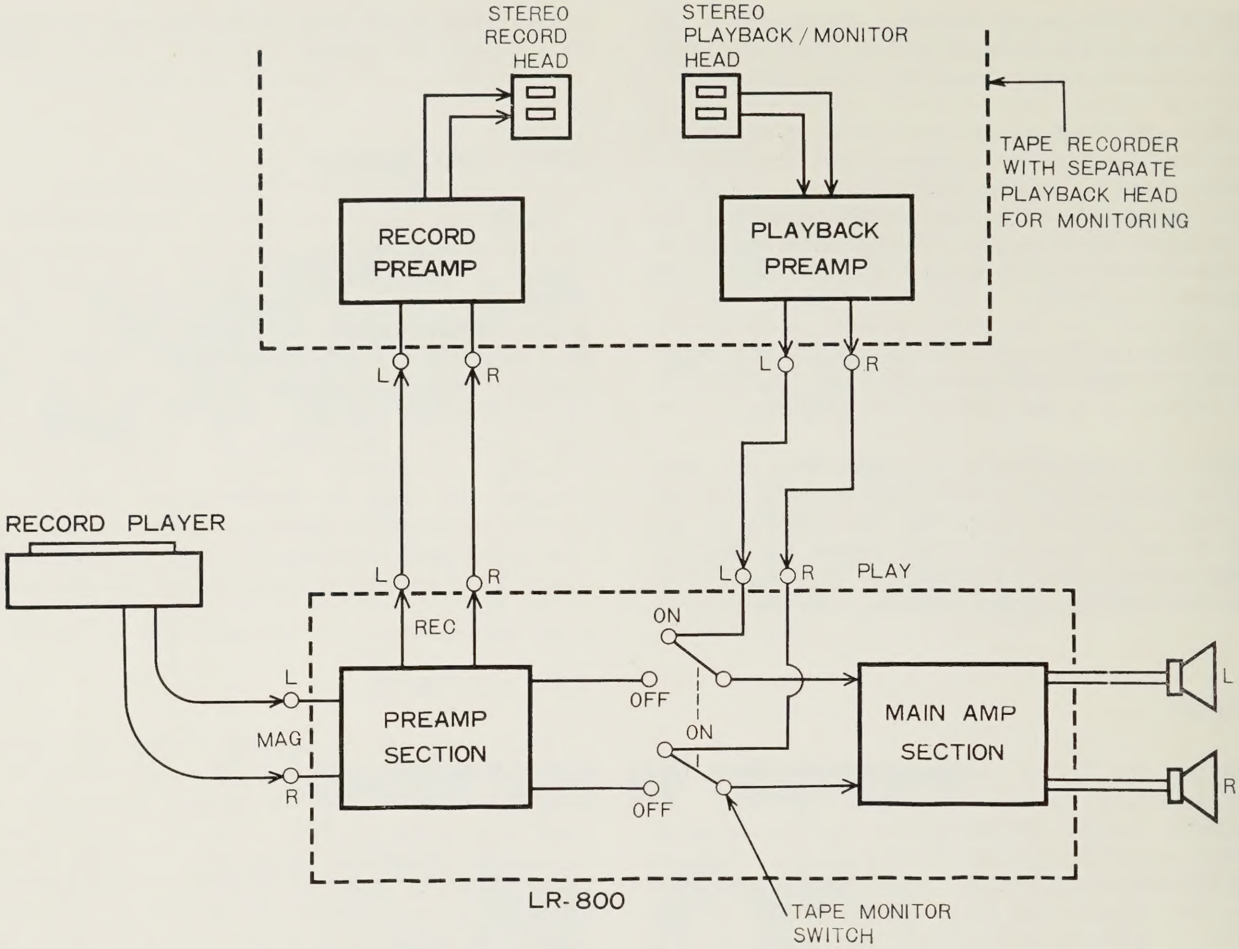

FIG. 3

to be pulled towards the stronger station. For optimum reception of any weak station that is next to a stronger station, it is therefore recommended that the AFC control be set to its minimum position (TUNE).

MPX NOISE FILTER

This switch inserts a filter into the circuit that effectively reduces high-frequency noise that may occur during FM stereo reception. It is therefore only operative when the SELECTOR is in the FM STEREO position. Under normal conditions, however, this switch should be left in the "off" position to permit full reproduction of the high frequencies.

LOUDNESS

It is an established scientific fact that at low listening levels the human ear does not respond equally to all frequencies. When played at very low volume, a musical program will appear to exhibit a fairly great loss of the bass tones and a slight loss of the treble tones. In order to compensate for this deficiency in the human ear, it therefore becomes necessary to provide added volume at the low (bass) and high (treble) frequencies. This is accomplished by the LOUDNESS switch. At low volume, it provides the required amount of bass and treble boost to enable the listener to hear the full range of frequencies at their proper levels. The loudness circuit works in conjunction with the Volume control so that at high volume control settings, the boosting action is automatically reduced, and the output of the amplifier assumes a normal response.

STEREO "SEARCHER"

Your receiver incorporates a special circuit which will enable you to locate stereo stations quickly and easily. When this push-button is in the depressed position (on), special circuitry is switched in which produces an audible tone in the loudspeakers when you are tuned to a stereo station. The circuit is operative only when the Selector switch is in the "FM Stereo" position. For complete instructions on its use, see the section "Locating FM Stereo Stations".

RUMBLE FILTER

This switch, when "on", removes any annoying low frequency rumble that may originate in your record player and can be heard from the speakers. Normally, however, this switch should be placed in the "off" position to permit the full reproduction of the low frequencies.

TAPE MONITOR

In the OFF position of this switch, the program selected by the Selector switch will be reproduced through the amplifier and heard from the speakers. Setting the switch in the "ON" position selects the program source connected to the "PLAY" jacks and reproduces it through the amplifier — regardless of the Selector switch setting. This feature is useful when employed with a tape recorder that is equipped with a separated playback/monitor head. During recording, the output of the playback/monitor head is conected (after suitable preamplification in the recorder) to the PLAY jacks on the receiver. Figure 3 illustrates this arrangement. Placing the MONITOR in the "Off" position allows the program source (in this case, a phonograph record) to be heard through the amplifier as you record. Placing the switch in the "On" position now allows the program you have recorded on the tape itself to be heard. In this way, you can monitor the actual recording on the tape and make any adjustments if necessary. By switching between the two positions ("On" and "Off"), you can also obtain a rapid comparison between the program source and the recorded material on the tape for tonal quality, level, etc.

SPEAKERS

To switch your speakers off during headphone listening, simply press this push-button in. For loudspeaker operation (with or without headphones connected), the button should be out. To release a button that has been pushed in, apply pressure briefly to the button and release.

POWER

This switch is used to apply AC power to the amplifier. To switch the amplifier on, simply rotate the switch to the "on" position.

SPEAKER PHASE (Rear of Amplifier)

This switch is used to obtain correct "phasing" of your loudspeakers. In effect, it reverses the connections to one speaker to correct for possible out-of-phase connections. More information on the use of this switch will be found in the section headed "Speaker Phasing and Balancing".

OPERATING INSTRUCTIONS

Before attempting to operate the receiver, make sure you have properly connected your loudspeakers and any other associated equipment you intend to use, such as a record player or tape recorder. For FM reception, you must have an antenna connected, as indicated previously.

Initially, set BASS, TREBLE and BALANCE controls to their mid-positions, SPEAKERS switch "on" (if using speakers), LOUDNESS, RUMBLE, MPX NOISE FILTER, and TAPE MONITOR switches "off". Set VOLUME to minimum and AFC to "TUNE". To power the receiver, turn the POWER switch on.

AM OR FM MONOPHONIC RECEPTION

1. Set SELECTOR switch to AM or FM, and MODE switch to "STEREO".
2. Adjust VOLUME control as necessary and tune in desired station for maximum closure of the electronic tuning indicator bar.
3. Adjust BASS and TREBLE or any other controls for desired tonal reproduction.

FM STEREO RECEPTION

1. Set MODE switch to "Stereo", SELECTOR to "FM Stereo" and set STEREO SEARCHER switch "on". See section following which describes the method for locating stereo stations.
2. Tune over FM band, listening for stereo indicating tone.
3. When the stereo station is thus located, set STEREO SEARCHER "off" and tune in the

station carefully for maximum closure of the electronic tuning indicator bar.

NOTE: Tuning to a **monophonic** station with the Selector in the "FM Stereo" position will often produce a "whistling" or "rushing" noise in the loudspeakers. This condition is normal and can be eliminated by switching the Selector to FM — the correct position for reception of monophonic FM stations.

LOCATING STEREO FM STATIONS

The "STEREO SEARCHER" circuit on your receiver offers a simple and fast means of locating FM stations which are broadcasting a stereo program. Operation is simple — you just tune over the FM band with the Stereo Searcher switch in the depressed (on) position and listen for a single-frequency tone in the loudspeakers. Monophonic stations will produce no definite tone — you will hear only a "rushing" noise and other miscellaneous sounds. A station broadcasting a stereo program will produce a clearly audible tone, however. When a stereo station is thus located, simply switch the Stereo Searcher "off", allowing the program to be heard, and then tune in the station accurately.

On occasion, you may receive a stereo indication on a station which sounds as if it is broadcasting a monophonic program. This condition is usually encountered during an announcement or newscast, and can be explained as follows: During stereo broadcasts, the complex FM wave transmitted from the station includes a component known as the "Pilot" signal. This signal (which is never heard) is used to synchronize the receiver to the transmitter. The pilot signal is also utilized by the "Searcher" circuit to provide an indication that a stereo program is in progress. Announcements or newscasts during a musical stereo program may actually be transmitted monophonically from the station, so that the sound heard from your left speaker will be identical to that heard from your right speaker. During such periods however, the station frequently retains the Pilot signal in the transmitted wave since it is inaudible anyway. In such a case, your receiver will produce an indication of stereo, even though the announcement or newscast is heard as a monophonic broadcast.

It should also be remembered that the musical program being transmitted from the station may have varying degrees of channel separation, depending on the musical selection which, most frequently, is reproduced from records. Since few record companies use the same stereo recording techniques, the amount of channel separation available will vary from one record to another. However, there is more to stereophonic sound than the mere division of musical instruments between the left and right channels. There is a subtle depth and spaciousness to the music with the sounds of various instruments distributed over a broad area. This particular characteristic will become more apparent if you make the following listening test. Set all controls for normal stereo operation, but place the SELECTOR in the "FM" position. Tune in a known stereo station and adjust tonal controls for desired reproduction. The sound you will hear from both speakers is monophonic. Now switch the SELECTOR to "FM Stereo" and note the change that takes place. By switching between "FM" and "FM Stereo" (preferably by someone else), the added depth and spaciousness of stereophonic sound will soon become apparent.

STEREO PHONOGRAPH OPERATION

1. Set SELECTOR to "Phono" and MODE switch to "Stereo".
2. Operate the turntable or changer.
3. Adjust VOLUME for desired level of sound; BASS and TREBLE for desired tonal reproduction.
4. Check balance of channels, if necessary, as indicated in the next section.

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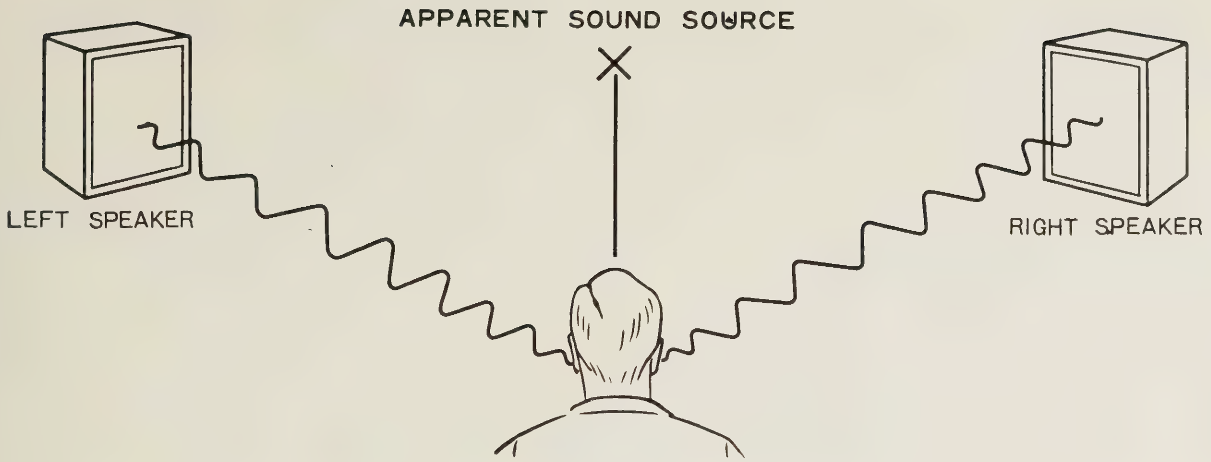

FIG. 4

SPEAKER PHASING AND BALANCING

Correct phasing and balancing is important in a stereophonic system. If the speakers are out of phase, they will work in opposition to each other and there will be a noticeable loss in the low frequencies (bass). If the speaker output levels are not equal, there will be an unnatural disrtibution of the musical program, resulting in a loss of the stereo effect. Correct balance and phase may be achieved using the method described below. It is based on a simple listening principle which says that if two speakers send out identical sound and you are equidistant from them, your ears will place the apparent source of sound half-way between the two speakers, as indicated in Figure 4.

1. If you have a stereo record player connected to the receiver, proceed as in (a); if you do not have a stereo record player connected, adjustments can be made using an FM stereo broadcast by proceeding as in (b). After completing (a) or (b), proceed to step 2.

   (a) Set the SELECTOR switch to "Phono" and MODE switch to "Stereo". Play a **monophonic** record containing heavy bass (low) tones.

   — OR —

   (b) Set the SELECTOR switch to "FM Stereo" and MODE switch to "MIX". Tune in (carefully) a stereo broadcast. If necessary, use the "Stereo Searcher" switch to locate a stereo transmission.

2. For this test, the speakers should be placed about 6 to 8 feet apart and facing inward slightly as shown in Figure 4. You will also require the help of another person to operate the amplifier controls while you position yourself mid-way between the speakers as shown.

3. Adjust VOLUME to slightly higher than normal listening level. Make sure that the BALANCE control is set to its mid-position or where the output from each speaker is approximately the same.

4. Have someone set the SPEAKER PHASE switch (at the rear of the receiver) first to one position and then to the other, and listen carefully to the sound output as the switch is moved back and forth. The correct, or "in-phase" position of the switch will produce the greatest amount of bass and you will also notice that the sound seems to come from an area somewhere between the speakers. Adjustment of the BALANCE control may be necessary to center the apparent sound source so that it seems to be located mid-way between the speakers. If the speakers are not in phase, however, the sound will not seem to come from any clearly defined area (unless there is a large difference in output between speakers), and you may have to move the SPEAKER PHASE switch to the other position.

   Remember, when the speakers are in phase and properly balanced during this test, the sound will seem to come from between the speakers as shown in Figure 4. During normal stereo operation this condition will no longer exist of course, and reproduction will be properly distributed in accordance with the manner in which the original stereo recording was made.

REDUCING HUM

As a general means of reducing hum, the following procedure should be carried out:

1. Turn on the receiver and all equipment connected to it.
2. Reverse the AC wall plug from the receiver to determine which position provides the least hum. Leave in this position.
3. Repeat this procedure with the AC plugs of the other components, using the selector switch to select the component being tested.

HUM BALANCE CONTROL

The hum balance control at the rear of the receiver will enable you to minimize any slight hum that may originate from the unit during Tape Head or Phono operation. The procedure outlined below should be carried out with a turntable or record changer connected to the receiver.

1. With the pickup arm at rest, set SELECTOR to PHONO, VOLUME control to maximum, BASS and TREBLE controls to their midway or "normal" positions, and all other switches set for normal stereo operation. The Rumble switch must be off.
2. Using a screwdriver, adjust the HUM BALANCE control for minimum hum from both speakers.

FUSE

The stereo receiver is fused in the AC primary to prevent damage of tubes and components. The value of the fuse is 4 amperes. In the event of its failure, this fuse should be replaced with one of the same rating. Replacing it with a fuse of a higher rating will not protect the receiver and may cause severe damage.

SERVICE

The LR-800 should require very little service except for occasional tube replacement which may become necessary in some cases. For problems of a more serious nature, we recommend that you return the unit to the Lafayette store from which it was purchased. As an aid to schematic diagram complete with normal operat-qualified technicians this manual contains a ing voltages.

Please note, however, that any damage incurred while attempting to repair a defect will automatically void the guarantee if still in force.

If the unit is to be shipped to our main office for service, please read the instructions which follow.

SHIPPING INSTRUCTIONS

Pack the unit very carefully to avoid damage in transit, preferably in its original carton. If the original carton is not available, use a sturdy carton with at least 3 inches of shredded paper or excelsior around the unit. In the latter case, wrap the unit in paper first to avoid particles of packing material getting into it. Include with the unit a letter explaining exactly what difficulties you have encountered. Ship by prepaid express if possible and mark ELECTRONIC EQUIPMENT — FRAGILE. Clearly address the carto nas follows:

SERVICE DIVISION
LAFAYETTE RADIO ELECTRONICS CORP.
111 JERICHO TURNPIKE
SYOSSET, L. I., N. Y.

will be properly distributed in accordance with the manner in which the original stereo recording was made.

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SERVICE

The LR-800 should require very little service except for occasional tube replacement which may become necessary in some cases. For problems of a more serious nature, we recommend that you return the unit to the Lafayette store from which it was purchased. As an aid to schematic diagram complete with normal operat- qualified technicians this manual contains a ing voltages.

Please note, however, that any damage incurred while attempting to repair a defect will automatically void the guarantee if still in force.

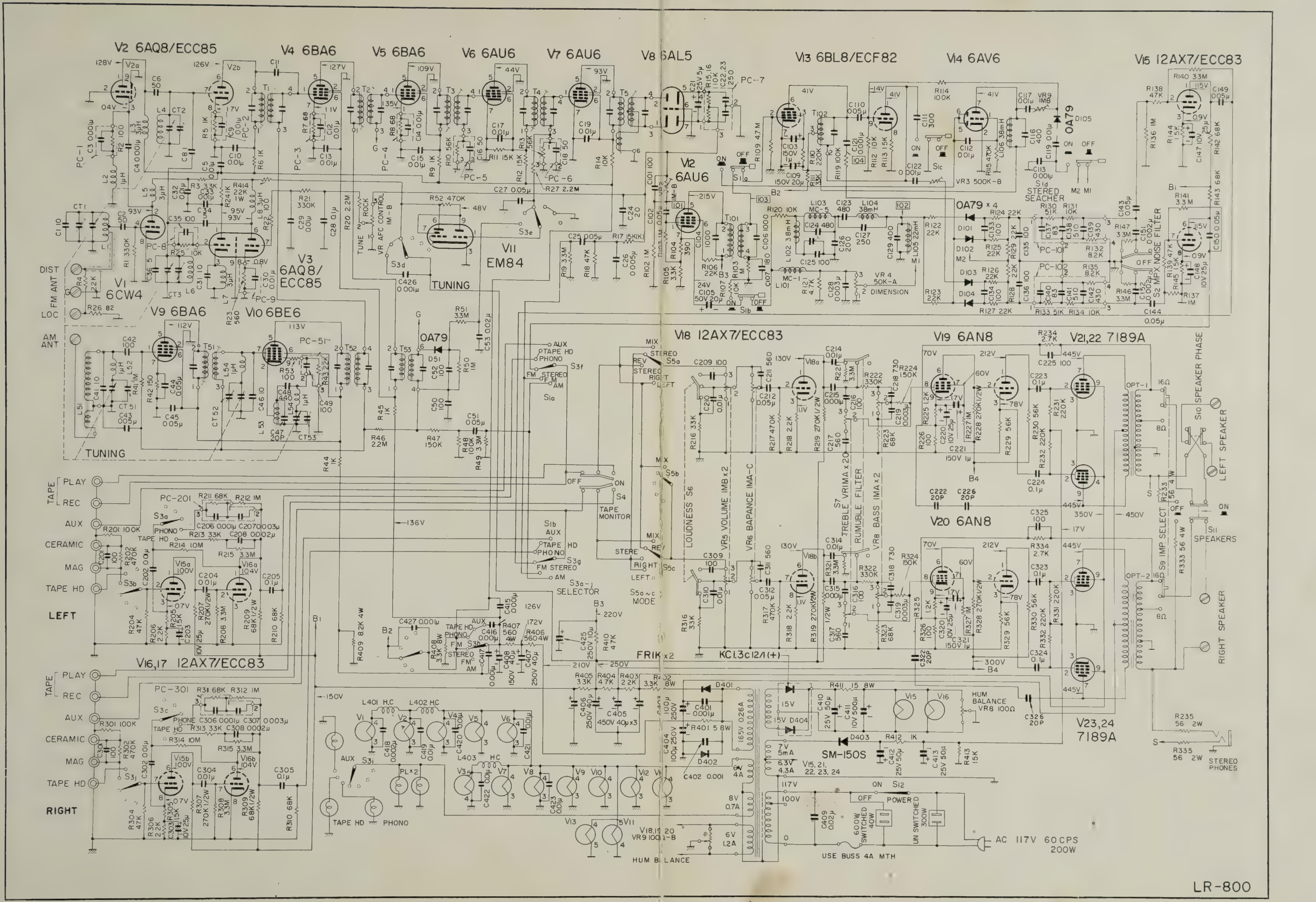
If the unit is to be shipped to our main office for service, please read the instructions which follow.

SHIPPING INSTRUCTIONS

Pack the unit very carefully to avoid damage in transit, preferably in its original carton. If the original carton is not available, use a sturdy carton with at least 3 inches of shredded paper or excelsior around the unit. In the latter case, wrap the unit in paper first to avoid particles of packing material getting into it. Include with the unit a letter explaining exactly what difficulties you have encountered. Ship by prepaid express if possible and mark ELECTRONIC EQUIPMENT — FRAGILE. Clearly address the carto nas follows:

SERVICE DIVISION
LAFAYETTE RADIO ELECTRONICS CORP.
111 JERICHO TURNPIKE
SYOSSET, L. I., N. Y.

SCHEMATIC DIAGRAM

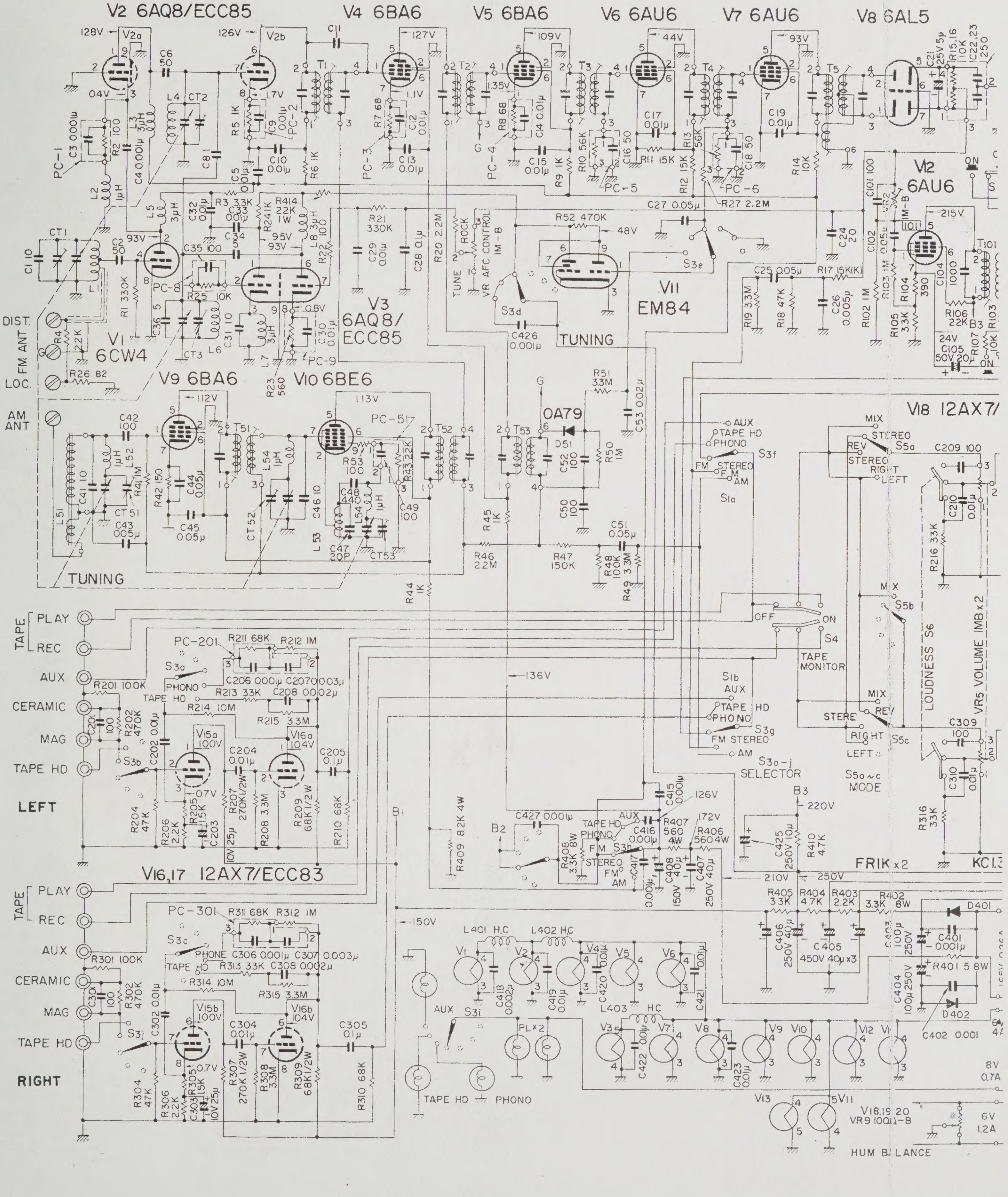


LAFAYETTE
RADIO ELECTONICS
CORPORATION
111 JERICHO TURNPIKE
SYOSSET, L. I., NEW YORK

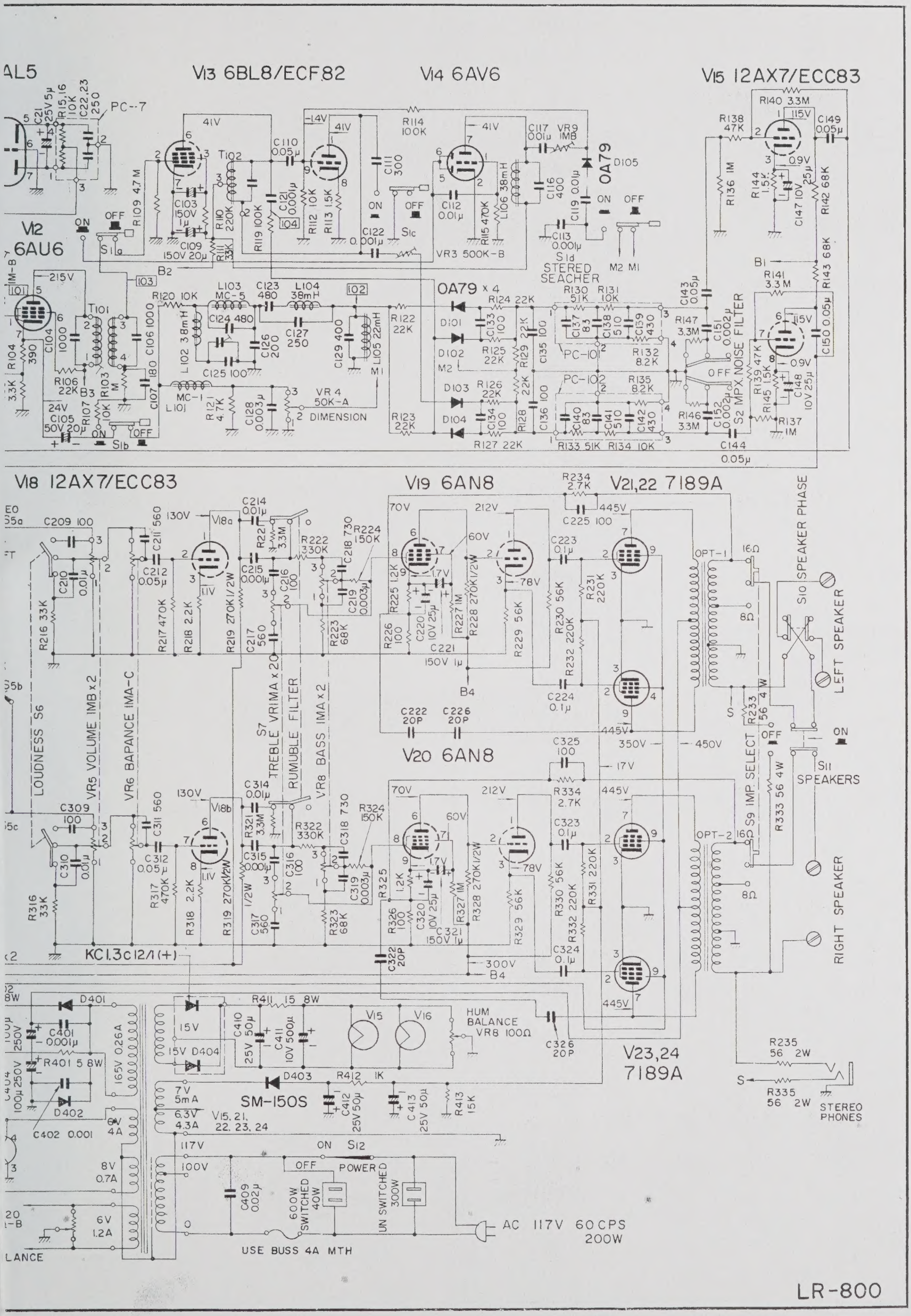
H05-764 (R)

PRINTED IN JAPAN

SCHEMATIC DIAGRA



DIAGRAM


AL5
V13 6BL8/ECF82
V14 6AV6
V15 12AX7/ECC83
V12 6AU6
PC-7
R140 3.3M
R138 47K
R136 1M
R144 1.5K
C147 10V 25μ
R142 68K
C149 0.05μ
115V
0.9V
R114 100K
C117 0.01μ
VR9 1MB
OA79
D105
T102
C110 0.05μ
C111 300
C112 0.01μ
C116 400
C119 0.01μ
L106 38mH
R115 470K
R109 4.7M
C103 150V
C109 150V 20μ
R110 220K
R111 33K
R119 100K
C121 0.001μ
R112 10K
R113 1.5K
C122 0.001μ
S1c
S1a
VR3 500K-B
C113 0.001μ
S1d STEREO SEACHER
M2 M1
ON
OFF
B1
B2
R141 3.3M
R143 68K
C143 0.05μ
T101
R120 10K
L103 MC-5
C123 480
L104 38mH
C124 480
C126 200
C127 250
C129 400
L105 22mH
L102 38mH
C125 100
C104 1000
C106 1000
C107 180
R104 390
R106 22K
R103
R107 10K
C105 50V 20μ
24V
B3
S1b
MC-1
L101
R121 4.7K
C128 0.003μ
VR4 50K-A DIMENSION
R122 22K
R123 22K
OA79 x 4
D101
D102
D103
D104
R124 22K
R125 22K
R126 22K
R127 22K
C133 100
C134 100
R129 22K
R128
C135 100
C136 100
R130 51K
R131 10K
C137 83
C138 510
C139 430
PC-101
R132 8.2K
PC-102
R135 8.2K
C140 83
C141 510
C142 430
R133 51K
R134 10K
R147 3.3M
C151 0.002μ
S2 MPX NOISE FILTER
R146 3.3M
C152 0.002μ
R139 47K
R145 1.5K
C148 10V 25μ
R137 1M
C150 0.05μ
C144 0.05μ
V18 12AX7/ECC83
V19 6AN8
V21,22 7189A
C209 100
C210 0.01μ
R216 33K
C211 560
C212 0.05μ
R217 470K
R218 2.2K
R219 270K 1/2W
130V
V18a
C214 0.01μ
R221 3.3M
R222 330K
C215 0.001μ
C216 100
C217 560
C218 730
R224 150K
C219 0.003μ
R223 68K
LOUDNESS S6
VR5 VOLUME 1MB x 2
VR6 BAPANCE 1MA-C
S7 TREBLE VR1MA x 2
RUMUBLE FILTER
VR8 BASS 1MA x 2
70V
212V
60V
R225 1.2K
C220 10V 25μ
R227 1M
R228 270K 1/2W
R226 100
C221 150V 1μ
B4
R229 56K
78V
R234 2.7K
C225 100
445V
C223 0.1μ
R230 56K
R231 220K
R232 220K
C224 0.1μ
C222 20P
C226 20P
OPT-1
16Ω
8Ω
R233 56 4W
S10 SPEAKER PHASE
LEFT SPEAKER
350V
450V
V20 6AN8
C325 100
17V
R334 2.7K
C309 100
C310 0.01μ
R316 33K
C311 560
C312 0.05μ
R317 470K
R318 2.2K
R319 270K 1/2W
V18b
C314 0.01μ
R321 3.3M
R322 330K
C315 0.001μ
C316 100
C317 560
C318 730
R324 150K
C319 0.003μ
R323 68K
R325 1.2K
C320 10V 25μ
R327 1M
R328 270K 1/2W
R326 100
C321 150V 1μ
R329 56K
C323 0.1μ
R330 56K
R331 220K
R332 220K
C324 0.1μ
C322 20P
300V
KC1.3c12/1(+)
OPT-2
S9 IMP. SELECT
R333 56 4W
S11 SPEAKERS
RIGHT SPEAKER
D401
C401 0.001μ
250V
R401 5 8W
D402
C402 0.001
165V 0.26A
R411 15 8W
15V
D404
C410 50μ 25V
C411 10V 500μ
V15
V16
HUM BALANCE VR8 100Ω
C326 20P
V23,24 7189A
R235 56 2W
R335 56 2W
STEREO PHONES
D403
R412 1K
SM-150S
C412 25V 50μ
C413 25V 50μ
R413 15K
7V 5mA
6.3V 4.3A
V15, 21, 22, 23, 24
6V 4A
8V 0.7A
6V 1.2A
117V
100V
C409 0.02μ
ON
OFF
S12 POWER
600W SWITCHED 40W
UN SWITCHED 300W
AC 117V 60CPS 200W
USE BUSS 4A MTH
LANCE
LR-800